ICC Docket No. 01-0662

Special and UNE Circuit Repair Coding Accuracy Plan

May 1, 2003

Repair Coding Accuracy Plan

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1. Purpose

The purpose of this plan is to describe the actions the Illinois Bell Telephone Company ("SBC" or "SBC Illinois") proposes to take to further improve accuracy and completeness[1] of closeout codes upon repair completion for Special Circuits and Unbundled Network Elements (UNEs).

The Michigan plan[2] (upon which this Illinois plan is based) was developed pursuant to the Michigan Public Service Commission's ("MPSC's") Order issued January 13, 2003, in Case No. U-12320 (SBC's §271 Checklist Compliance Docket) as a result of extensive discussion with MPSC staff and CLEC Industry Collaborative.[3] SBC has retained BearingPoint to evaluate SBC's implementation of this plan. On March 26, 2003 the MPSC approved this plan as submitted with minor modifications on March 13, 2003. Final modifications were made to this plan in compliance with the MPSC's Order issued March 26, 2003 and resubmitted to the MPSC on April 2, 2003.

The only difference between the repair coding accuracy plans submitted for Michigan and Illinois is the scope of the management review activities underway in each of the affected work centers. In Michigan, the reviews include closeout codes applied to trouble reports for both Special and UNE circuits. This is appropriate since coding accuracy for Special and UNE circuits did not pass BearingPoint's test requirements. In Illinois, however, only the Special circuits failed to pass the BearingPoint test. As such, the management reviews in Illinois are limited to the coding applied to Special circuits. Most other activity described below, including the documentation updates and the awareness and training sessions, have and will continue to be applicable to all circuit categories.

2. Issue Definition

BearingPoint, Inc. (f/k/a KPMG Consulting) first issued Exception 131 as part of the Third-Party Operations Support Systems ("OSS') testing on June 27, 2002. In its report, BearingPoint stated that in reviewing trouble reports and close out code data, it determined that SBC had failed to meet a 95% accuracy benchmark for trouble ticket closure coding for Special circuits. The initial exception report for Illinois had included benchmark failures for Resale, UNE and Special circuits. In the course of resolving this issue, BearingPoint completed a retest of repair coding accuracy in December 2002 and reported that while Resale and UNE circuits had passed their test requirements, Special Circuits had not. This exception encompassed all five Midwest states. BearingPoint's December 20, 2002 Illinois OSS Evaluation Project Report found that test criteria

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[1] AT&T stated, "accuracy is equally important as completeness." See, 11/15/02 Connolly Affidavit filed with the MPSC, p. 36, para 83

[2] The Michigan Plan included UNEs due to Michigan Bell not passing the BearingPoint test for this product set. In the Illinois BearingPoint test, Illinois Bell passed this test and therefore it is not specifically included in this plan.

[3] The MPSC ordered the implementation of this plan to further improve SBC's repair coding accuracy. The MPSC was clear, however, that the plans were not required to demonstrate that SBC was "... in compliance with each of the Section 271 competitive checklist items, including each of the areas addressed by the modified compliance and improvement plans." (MPSC Order, March 26, 2003, Case No. U-12320, page 2.)

for TVV7-14 (p. 763) was "not satisfied." Within the five Midwest states, Resale coding has successfully closed in all five states, the UNE coding has successfully closed in four states (i.e., Illinois, Indiana, Ohio and Wisconsin) and Special coding remains in unsatisfied in Illinois, Indiana, Michigan and Ohio. Wisconsin has successfully completed Special circuit coding retesting.

In response to BearingPoint's evaluation, SBC has identified areas for improvement and implemented a number of corrective measures, which as summarized above, have improved the performance results in those states where the retest was conducted after those corrective measures were implemented. In its final retest in Illinois, BearingPoint reported that 87.5% (28/32) of Special circuits and 94.8% (128/135) of UNE closeouts were coded correctly. It should be noted that these coding results were in parity with retail coding and that SBC successfully passed BearingPoint testing on trouble repair itself, thus indicating that SBC provides nondiscriminatory access to its maintenance and repair ("M&R") systems and services

3. Root Cause Analysis

Trouble tickets are closed out by the repairing technician in the field or in the central office, either directly or through the Overall Control Center ("OCO") which encompasses the Local Operations Center ("LOC") and the Customer Service Bureau ("CSB") for UNE troubles, and the Special Services Center ("SSC"), for Special circuits. When the repair is complete, the technician also enters the appropriate closure codes to the ticket. The closeout code faults reported by BearingPoint within this exception appeared to fall into one of the following general situations:

1) Situations in which a fault inserted by BearingPoint were subsequently reported as "No Trouble Found" (NTF) by SBC.
2) Situations in which the fault inserted by BearingPoint on the network side of the circuit were subsequently reported as being within the customer-owned portion of the circuit and for which CLEC billing was applied.
3) Situations the same as Item #2 above, but no CLEC billing was applied.
4) Situations in which the fault inserted by BearingPoint on the network side of the circuit was properly repaired, but the coding used did not accurately identify exactly where the fault had occurred.

Very few of the items in Situation #1 above involved cases in which SBC clearly miscoded the actual trouble cause and repair. Most of the cases involved situations in which BearingPoint had inserted multiple faults in the same test bed area for several test circuits. While dispatched to repair the fault on one circuit, the technician noticed faults placed on several additional circuits[4] and repaired them as well. The technician corrected the multiple faults but did not document the work performed on those additional circuits that needed repair, but were not listed on the trouble ticket for the test circuit. Therefore, when dispatches were made on the reported failures of the additional circuits, the dispatched technician appropriately closed the report as "NTF".

For items that fell within Situation #2 and #3, some of the errors appear to have been caused by a lack of attention to, or unfamiliarity with, the meaning of each disposition code. Others were

[4] Usually jumpers opened and laid back on the Main Distributing Frame (MDF) in the Central Office.

similar to Situation #1 described above. These involved situations whereby the problem was cleared prior to dispatch. However, instead of listing the cause as "NTF", the technician assumed that an intermittent fault may reside within the CPE portion of the circuit.
Similarly, the items found to fall into Situation #4 appear to be mostly due to errors by the repair technician or maintenance administrator. These types of closeout errors had no impact on overall billing/performance error rate because they mostly involved incorrect coding of the location in the SBC network that the fault was corrected.

Accordingly, with the exception of Situation # 1, the root cause for incorrect close out codes was repair technician error, either in the field, the central office or by the LOC Maintenance Administrators ("MAs") and the Special Service technicians.

4. Actions

The internal improvement plan originally proposed by SBC in Michigan and Ohio was constructed to address the accuracy of trouble ticket closure coding for various types of trouble conditions found including troubles noted as "No Trouble Found" ("NTF") and Customer Premises Equipment ("CPE"). The plan included many of the steps identified in this plan.

In Michigan, the MPSC in its January 13 Order directed that an independent third party verify the results achieved from this plan. It also directed SBC to include evaluation criteria by which the third party could measure whether the corrective actions resulted in improved coding accuracy. As such, the plan now includes third-party verification. The plan has also been enhanced to address specific concerns raised by certain parties in the Michigan proceeding. These enhancements also address concerns raised by certain CLECs in the Illinois proceeding. For example, McLeod USA and TDS expressed concerns that the plan would be eliminated as soon as SBC received 271 authorization and that there was no mechanism in place to measure performance over the long term.[5] Furthermore, they opined that training and review sessions should continue over the next three years.[6]

The following activities identify the steps that SBC has taken for UNE, Resale and Specials or plans to take to improve the accuracy and completeness of trouble ticket closure coding for Special circuit repairs.

[5] ALJ Proposed Order, April 8, 2003 at ¶1294.

[6] *Id*. at ¶ 1296.

Documentation Updates:

During the course of its investigation of the errors noted by BearingPoint in Exception 131, SBC has initiated a number of improvements in the documentation available to technicians and their managers on proper coding techniques and application. These improvements include:

- The SBC document that is used as a reference for Cause Codes was updated to clarify use of Cause Code 600 in late June 2002. Cause Code 600 is used to identify those situations where SBC is unable to determine what caused a particular case of trouble. This documentation gap was identified via a number of cited trouble tickets for both Special and UNE circuits. The updates to the documentation provided a clearer description of the process currently followed by SBC technicians and addressed questions raised by BearingPoint. The updated SBC document was provided to BearingPoint for review on August 1, 2002.

- Local Operations Center Job Aid JA-27B has been updated to reflect additional steps for Maintenance Administrators to take that will improve coding accuracy when a mechanized loop test ("MLT") indicates "Open Out"[7] following a circuit retest. MAs and managing supervisors responsible for the accurate coding of closed trouble tickets in the LOC were covered on this process enhancement between August 1 and August 9, 2002.

- SBC updated internal Methods and Procedures ("M&P") documentation (SBC 660-169-013) used to define accurate disposition coding of trouble tickets to include new disposition codes and clarify the use of existing disposition codes. Updates to the M&P were completed on August 16, 2002. These updates also generated the following outputs:
    - Installation and Repair (I&R) internal Job Aid (JA 170 - August 20) was updated to reflect the M&P changes/clarifications.
        - Awareness sessions were conducted 8/23/02 through 11/05/02 to review updated procedures.
    - A LOC "Flash" (02RC49) was issued 8/26/02 to reflect the new disposition codes.
    - The CSB Handbook was updated 8/26/02 to reflect the new disposition codes.
        - Issued a CSB "Flash" to notify CSB personnel of updated handbook procedures.

- December 16, 2002 Central Office Technician method and procedure documentation (SBC 002-216-298) was issued for documenting corrective maintenance trouble tickets in central offices (COs). A requirement for performing quality checks on coding has also been incorporated into the frame management document SBC 002-531-045 ("CO Managers Frame Reference Guide – AIT Region").

[7] "Open out" condition on a MLT means a circuit trouble is testing beyond the SBC Central Office.

Training Review Sessions:

SBC has conducted comprehensive awareness and training sessions with personnel in each of the four work groups involved in trouble ticket closures. In those states where BearingPoint testing continued beyond the date(s) when such sessions were completed, test results indicated marked improvement in coding performance. These sessions included:

- SBC conducted training review sessions (a/k/a awareness sessions) to reinforce current procedures used for the close out of Cable Multiple tickets when wholesale account trouble tickets are attached to the lead cable trouble ticket number. Sessions covering all I&R Operations Center personnel were completed by August 13, 2002. A "Cable Multiple" ticket number is assigned to a damaged cable or cable failure that potentially impacts service to multiple subscribers served by the same cable. Individual subscriber (or CLEC) reports of service interruptions having individually assigned trouble ticket numbers may become attached to the lead or Multiple Cable Trouble Ticket Number ("CTTN"). SBC was made aware that in at least two audited instances, individual wholesale trouble reports attached to a Cable Trouble Ticket Number were closed as the CTTN closed and were not "detached" and tested to confirm restoration of the reported trouble. Reinforcement of current procedures to detach individual case trouble tickets from the CTTN and retest with the CLEC was completed for I & R Operations Center employees through Awareness Sessions conducted between August 8 and August 15, 2002.

- SBC conducted awareness sessions to reinforce current procedures used for the disposition coding of trouble reports closed when multiple faults are found on the same telephone line.
    - Sessions covering Installation and Repair field technicians in all manager groups were completed by August 12, 2002.
    - Additional training sessions with I&R personnel were conducted in November 2002.

- Additional review sessions for LOC personnel were conducted to reinforce accurate trouble closure procedures were completed by November 10, 2002.

- Review training sessions were conducted with Special Service Center personnel to reinforce correct trouble ticket coding procedures. These review sessions were completed by November 25, 2002.

- Review sessions were conducted through January 31, 2003 with SBC Midwest Central Office technicians in Michigan, Ohio, Indiana and Illinois[8] manager groups to review the newly created Methods and Procedures for documenting trouble tickets and established procedures for proper trouble ticket coding.

[8] Since Wisconsin passed, trouble ticket coding these review sessions were not conducted.

- A coding refresher review session will be conducted within each of the four work groups (i.e., Special Services Center and Central Office) within one year of the training sessions described above.

- Training packages for new technicians in all work centers already contain trouble disposition and coding and will continue to be part of the training program.

Management Review Activities

To verify that the improvements to documentation and the training/awareness sessions have had the desired affect (i.e., improvement in coding performance), SBC is conducting its own internal reviews of Special circuit trouble ticket closures in both of the work groups involved. These reviews, which will be conducted over the next three years, focus both on closeout coding in general, as well as specific problems brought to the attention of SBC by individual CLECs (e.g., NTFs). These reviews include:

1) Special Services Center

- To monitor the accuracy and completeness of trouble ticket coding, trouble ticket coding review has been incorporated into the regularly scheduled quality control measures utilized by the Special Services management. This effort began December 2002.

2) Central Office

- Beginning in March 2003, a monthly sample of closed CLEC trouble tickets in Illinois will be reviewed for narrative and coding accuracy.

In addition to these targeted coding review sessions SBC has incorporated trouble ticket coding into its internal ISO audits which are conducted approximately every three months within the various work centers. If significant ticket coding problems are identified during these ongoing audits, SBC will initiate new training/awareness sessions with the groups involved.

SBC acknowledges that the "original source information" as noted by AT&T[9] is not available in the above-cited improvement measures. However, SBC believes that these measures will improve the accuracy of trouble ticket coding based on the types of errors noted by BearingPoint in the test. This improvement will be demonstrated through the Third Party evaluation.

[9] See AT&T's comments filed 11/15/02, Connolly affidavit at pp. 35-36, paras 80-83

Repair Coding Accuracy Plan

The following provides the timelines and current status of each of the items contained in the actions noted above:

	Task	Begin	End	Status
1.	Update documentation for Cause Code 600	06/01/02	06/30/02	Complete
2.	Update LOC Job Aid JA-27B	07/31/02	08/01/02	Complete
	A. Conduct Job Aid Training	08/01/02	08/09/02	Complete
3.	Develop "awareness" training and conduct sessions with Installation & Repair Operations Center personnel to review procedures for "Cable Multiple" trouble tickets	08/01/02	08/08/02	Complete
	A. Conduct "Awareness" sessions	08/08/02	08/15/02	Complete
4.	Develop awareness training for I&R personnel to reinforce coding of trouble tickets when multiple faults are on the same line	08/10/02	08/11/02	Complete
	A. Conduct awareness sessions	08/11/02	08/12/02	Complete
5.	Update Methods and Procedures to include two new disposition codes and clarifications of existing codes.			
	A. I&R internal job aids were updated to reflect M&P changes/clarification	08/20/02	08/30/02	Complete
	B. Conduct I&R awareness sessions to review updated job aids	08/23/02	11/05/02	Complete
	C. Issue LOC "Flash" to advise of new disposition codes	08/26/02	08/26/03	Complete
	E. Issue CSB "Flash" to advise of handbook updates with new disposition codes	08/26/02	08/26/03	Complete
6.	Update Central Office M&P for trouble ticket closure			
	A. Conduct review sessions with Central Office technicians	12/17/02	1/31/03	Complete
	B. Initiate internal reviews of closed CLEC trouble tickets	03/01/03	04/01/06	Ongoing
7.	Conduct review training sessions with Special Service Center personnel	11/20/02	11/25/02	Complete
8.	Incorporate quality reviews of trouble tickets into current Special Service Center quality control measures	12/01/02	04/01/06	Ongoing
9.	Expected start of BearingPoint testing[10]	07/01/03		
10.	Conduct refresher review session with the Central Office and Special Service Center work centers	08/01/03	12/01/03	

[10] BearingPoint may elect to affirm SBC's documentation improvements and internal reviews prior to this date.

5. Third Party Examination Approach

This plan will be evaluated by a third party. While the third party selected, BearingPoint, will design its own work program and parameters, SBC anticipates that the third party evaluation will address and include a process evaluation and a review of actual commercial transactions as follows:

- The third party will evaluate SBC's implementations of the actions described in the "Actions" section of this plan which pertain to Special Circuit Trouble Ticket Coding by reviewing documents, conducting interviews, and performing site visits, as deemed necessary by the third party. . This evaluation will include a review of SBC's quality review results. SBC expects this process evaluation to begin shortly after the ICC approves this plan with a final report pursuant to BearingPoint's project plan.

- The third party will report on coding accuracy and completeness by comparing the trouble ticket coding applied to actual troubles found Special Circuits to the narrative contained in the trouble report using a nonbiased sample from commercial production in the SBC Midwest region. The sample design and the evaluation methodology for this transaction analysis will be reviewed with SBC and the MPSC staff prior to its implementation. SBC expects BearingPoint will begin its analysis of commercial production transactions no later than July 1, 2003 with a final report pursuant to BearingPoint's project plan. The accuracy and completeness of closure codes for Special Circuit repairs is expected to improve the level of accuracy as reported by BearingPoint with test results of 87.5% for Special Circuits[11]. If the third party evaluation does not show an improvement for Special circuits has been achieved, any further required actions will be determined by the ICC.

- SBC will file bimonthly third party reports beginning with April-May 2003 period, to be filed by June 15th, until final process and transactions reports are completed. These reports will be filed with the ICC by the 15th of the following month and served on the parties of record for ICC Docket No. 01-0662.

6. Additional Reporting

SBC will provide quarterly reports for three years to the ICC of the results of ongoing management activities, along with its assessment of whether the results indicate that further refresher training is appropriate or has been conducted. For each of the work centers involved, the reports will include the following information:

[11] See BearingPoint Exception 131, Disposition Report, December 20, 2002

1) the quantity of tickets reviewed;
2) percent or quantity found accurate;
3) follow-up activities taken (if needed).

Although the management reviews in Illinois will be limited to trouble ticket closures on Special circuits, SBC will provide the ICC with the results of the management reviews of UNE circuit trouble ticket closures in Michigan as well.